Key findings of the report

Municipal Solid Waste Management Unit
Centre for Science and Environment

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TANZANIA
AN ASSESSMENT OF THE SOLID-WASTE-MANAGEMENT ECOSYSTEM
Environmental Management Act, 2004- Highlights

• Part IX of the Act dedicated to Solid Waste Management (SWM)
• Section 114 to Section 119
  • Section 114- Minimization of solid waste
  • Section 115- SWM in market places, institutions & business areas
  • Section 116- SWM from industries
  • Section 117- SWM from urban & rural areas
  • Section 118- Waste transfer stations
  • Section 119- Final disposal of solid waste
Solid waste generation & Sources.

- As per the 2012 census- a population of 51 million

- Estimated generation of 12.1 to 17.4 million tonnes per year.

- Generation rate of 0.66-0.95 kg per capita per day

Source: VPO, Tanzania Investment Guide on Waste management
Composition of solid waste

- Food waste: 37%
- Garden and wood waste: 30%
- Paper: 11%
- Plastic: 7%
- Glass: 4%
- Metals: 1%
- Textile: 2%
- Ash: 8%

Source: VPO, Tanzania Investment Guide on Waste Management
Collection & Disposal of mixed waste

- Collection 50%
- Burying 30%
- Random disposal 17%
- Open burning 3%

Source: VPO, Tanzania Investment Guide on Waste Management
Key actors in solid waste collection

- Private companies 55%
- Local government authority 25%
- Community-based organizations 20%

Source: VPO, Tanzania Investment Guide on Waste Management
Waste generation in metropolitan areas

Compiled from Solid waste management in urban centres of Tanzania, 2016

<table>
<thead>
<tr>
<th>City</th>
<th>Waste generation (TPD)-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dodoma</td>
<td>305</td>
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<td>Dar es Salaam</td>
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<td>Arusha</td>
<td>550</td>
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<tr>
<td>Mbeya</td>
<td>400</td>
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</tbody>
</table>

Population based estimation (per capita/day generation)

<table>
<thead>
<tr>
<th>City</th>
<th>Urban population (As per 2012 census)</th>
<th>Waste generation (TPD)-2012</th>
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<tbody>
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Challenges

• Legislative & Regulatory
  • Disconnect between legislations (EMA, 2004) & bye-laws
  • Need for issue based guidelines on solid waste management

• Institutional & Administrative
  • Solid waste management needs to be prioritized
  • Compliance of legislation needs more focus
  • Institutional enforcement needs strengthening
  • Capacity building, monitoring & oversight

• Improved systems to address data insufficiency
  • Need for system to generate, manage, & analyze data around solid waste
  • Scientific method for inventorization & composition studies

• Operational challenges
  • Low focus on source separation
  • Low collection efficiency
  • Less focus on decentralized management
  • Waste management infrastructure
Recommendations

• Legislative & Regulatory
  • Align bye-laws to EMA, 2004
  • Issue SWM guidelines to municipal councils
  • Introduce concept of Extended producer responsibility

• Institutional & Administrative
  • Result oriented funding
  • Capacity building of all stakeholders
  • Involve technical support organizations/ Think tanks

• Systems development to tackle data insufficiency
  • Continual waste inventorization & composition studies
  • Mechanism for data collection and validation

• Operational opportunities
  • Waste Minimization
  • Source separation
  • Efficient collection
  • Choice of technology- emphasize decentralization
  • Stakeholder participation
  • Monitoring & Evaluation
Thank you!